THE PACIFIC COVID-19 INFODEMIC
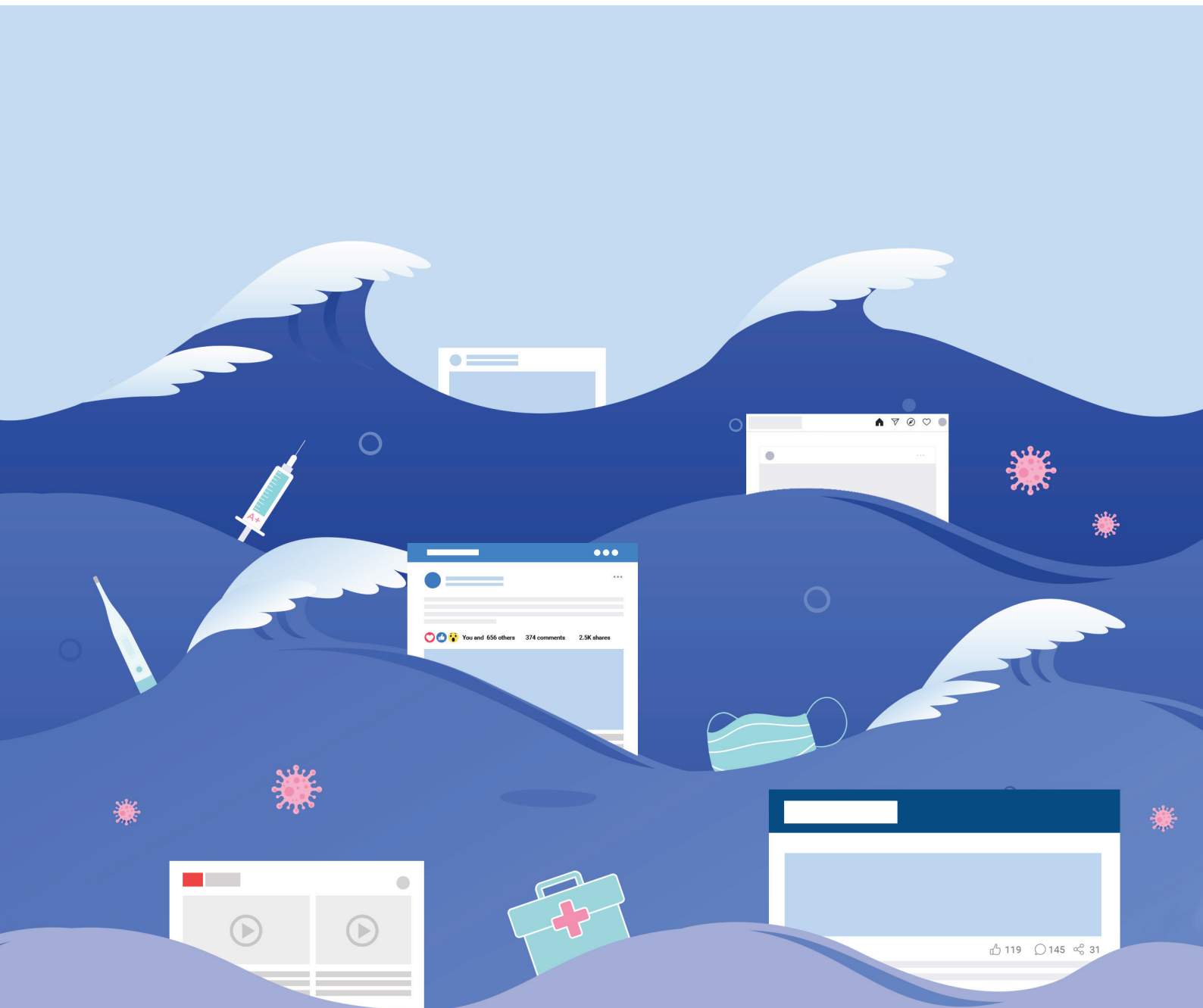
Challenges and opportunities in the Pacific's response to an online information crisis

The Asia Foundation

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Challenges and opportunities in the Pacific's response to an online information crisis

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EXECUTIVE SUMMARY

The Covid-19 pandemic has revealed dangerous vulnerabilities in the Pacific's digital information ecosystems, as well as great opportunities to use the internet to deliver access to information. Despite noteworthy initiatives by the region's governments and civil societies to communicate with citizens through the internet and social media, a spate of false and harmful information online has led to public confusion around how the virus spreads, who has been infected, and what is being done to maintain public safety. Moving forward, local, regional, and international stakeholders can learn from the experience of the Covid-19 information crisis in the Pacific to build resilience into the Pacific's online information ecosystems in order to protect them during the current "infodemic" and against future online threats.

This paper highlights three critical issues that hinder responses to online misinformation in the Pacific:

- **Absence of safeguards to protect users online:** Mechanisms that protect social media users in larger and better-served markets, such as anti-abuse systems and transparency tools that help users identify trustworthy content, are rarely available in the Pacific or have not been adapted to fit the local context.
- **Limited capacity of local media to counter falsehoods:** Media actors in the Pacific lack the resources, technical capacity, and, in some cases, access to provide quality reporting that corrects falsehoods and conveys reliable information to local communities.
- **Pacific cybersecurity policies and strategies are yet to adjust to the new information space:** While online disinformation campaigns are becoming more sophisticated and widespread, national- and regional-level cybersecurity frameworks and institutions in the Pacific are still adjusting to these emerging threats.

The Covid-19 pandemic highlights - and, in some cases, heightens - the region's vulnerabilities in each of these three areas and creates new challenges:

- The pandemic has increased people's need for regular updates, but with official information arriving slower and less consistently than the rumor mill, much of this demand is filled by informal social media communities, chat groups, and individuals with large online followings.

- Although many governments have been proactive in posting local-language updates online, Pacific Covid-19 discourse is nonetheless muddied by various conspiracy theories and misconceptions.
- The local and regional media continue to report on the pandemic, but Pacific journalists lack scientific and medical literacy, government emergency orders place limits on what the media is able to cover, and the current economic decline is cutting into revenues and forcing newsrooms to lay off staff.
- Finally, the scramble to address Covid-19 misinformation has led to ad-hoc applications of cybercrime laws, online safety legislation, and policing to a very complex issue.

The Asia Foundation, along with an advisory group convened for this project consisting of experts, practitioners, and policy makers from Pacific island countries and territories, recommends the following actions to address these challenges:

Strengthen official credibility and visibility online

Within governments, stronger technical capacity and greater focus on online information-sharing could improve the credibility and accessibility of risk communication and other official information. Social media companies and international organizations can support this by extending important tools and training resources to the region.

Encourage productive, multi-stakeholder approaches to misinformation

Pacific stakeholders can implement systems that add richer context into online discussions and instill greater digital and media literacy among Pacific communities. Civil society can play a leading role, especially for fact-checking, media production for local audiences, knowledge transfer, and education programs that reach local communities and vulnerable groups.

Prepare for new and emerging threats to online information ecosystems

Recovery from Covid-19 and responses to future crises will require stronger national and regional mechanisms for identifying and reporting problematic content online; better coordination and dialogue across institutions and governments within the region; more effective engagement between social media companies and Pacific leaders; and stronger local capacity to identify problematic content and bad actors online. Leaders can take practical steps now to anticipate and prepare for future potential threats to health and safety.

INTRODUCTION

This report is the result of independent research carried out by The Asia Foundation's regional Technology Programs team and a group of advisors and consultants from several Pacific island countries. It draws on qualitative analysis of social media discourse and news reporting in the Pacific as well as interviews with dozens of stakeholders from health, journalism, and technology communities across the region. Based on these findings, this paper seeks to describe the present state of online "information ecosystems" in Pacific island countries and territories; the risks and harms these ecosystems have faced during the Covid-19 pandemic; and the actions by government, the private sector, and civil society to respond to these risks.

As in other times of uncertainty and panic, the Covid-19 pandemic has caused an explosion in false and harmful information online all around the world.[1] To refer to this information overload, experts have begun using a new term: an *infodemic*.[2] Misconceptions and myths abound, including false claims about the origins of the virus, its modes of transmission, and acceptable methods for treatment and prevention.[3] Fear of the virus has inflamed existing fractures and prejudices within fragile and conflict-affected communities, leading to stigmatization of suspected virus carriers, increased tensions and hate speech between ethnic and religious groups, and some instances of violence.[4] The sharing of patients' personal information online, whether by design or through data leaks from contact tracing programs, has led to harassment and stigmatization of individuals accused of spreading the virus.[5] Finally, the concerns around the pandemic intersect with other fears and conspiracy theories that predate Covid-19, including opposition to vaccines and 5G networks.

The general environment of uncertainty and information overload around Covid-19 has also primed the space for more targeted *disinformation* efforts.[6] Some of this appears to be the work of coordinated influence operations - that is, online propaganda campaigns executed by organized groups with a particular target in mind.[7] But even when coordinated efforts do not sway public opinion toward a particular conclusion, they add to the glut of false and misleading content that is

freely available on the internet, drowning out high-quality, fact-based journalism and reducing trust in online content overall.[8]

Ultimately, the sheer volume of ambiguous, misleading, and skewed information online makes it very difficult for users to understand what is true and what is not. In a study of English-language fact-check articles by the Reuters Institute and the Oxford Internet Institute, the majority of "misinformation" about Covid-19 were not wholly fabricated falsehoods, but true information that had been "spun, twisted, recontextualised, or reworked" to reach a false or misleading conclusion.[9] This reflects a trend identified in health and medical communication even prior to the Covid-19 pandemic: it is very difficult to preserve nuance, uncertainty, and contextual factors in public health communication, especially online.[10] Dealing with a novel pathogen like Covid-19 is even more difficult because of the nature of scientific progress: when new research is published contradicting prior findings, public trust in science can actually be undermined in favor of less nuanced or simpler, counter-factual explanations.

The Covid-19 pandemic has highlighted several vulnerabilities in Pacific island countries' and territories' ability to respond to "infodemic" risks online. As the following sections will describe, misinformation, falsehoods, and misconceptions about the virus have spread widely across Pacific social media channels during the pandemic (Chapter I). In general, Pacific governments, health authorities, and other leaders are well aware of the threat that online misinformation poses during the pandemic, and they have made real efforts to address it. But responses to the infodemic have been limited by several challenges (Chapter II). The Pacific's experience with the Covid-19 infodemic also points to several other risks that could be exacerbated by emerging issues and cyber threats (Chapter III). Based on these findings, this paper provides an analysis of key trends and contributing factors that have affected the region's response to Covid-19 and which also have bearing on its readiness for future risks to the online environment (Chapter IV). Finally, it concludes with a set of several recommendations for how stakeholders in the region might strengthen official credibility and visibility online, encourage productive remedies for misinformation, and prepare for emerging threats (Chapter V).

1. FALSE AND HARMFUL CONTENT DURING THE COVID-19 PANDEMIC

Despite the best efforts of Pacific governments, civil societies, citizens, media organizations, and institutions, misinformation about the Covid-19 pandemic has continued to spread online. This section describes some of the types and sources of false and harmful content that have been identified during interviews with key stakeholders and examination of local social media groups and pages.

Constant flow of misinformation from outside the region

Due to the region's large English-speaking population and many historical and diasporic connections abroad, Pacific social media users are exposed to many of the same false rumors and conspiracy theories as other members of the global community. Once posted, they spread quickly through the local "coconut wireless" – the popular term for informal gossip networks considered to be much faster than any formal news outlet, though not necessarily more accurate. People post memes and share stories that gain traction elsewhere, including theories that religious piety or prayer will protect people from infection, false claims about 5G networks, and conspiracy theories about China's role as a supposed perpetrator of the pandemic. This content is sometimes flagged by Facebook, in line with their commitment to preventing the spread of Covid-19 misinformation, but only occasionally.

For example, in the first half of 2020, global fact-checkers started flagging a message laden with inaccuracies and wrongly attributed to UNICEF that spread through WhatsApp, Facebook, and other social media platforms around the world.[11] The message contained multiple false claims about Covid-19, including that the virus cell is large enough that "any mask" can block it, that it cannot live in temperatures above 26 or 27 degrees Celsius; and that people should drink hot water and avoid ice cream and cold foods in order to stay healthy. This or similar messages have been reported on every continent, and the message appears in the Pacific as well – Facebook searches return results for nearly identical posts in Fiji, Papua New Guinea, and Kiribati, and it has been shared by at least one national-level political figure within the region. None of these messages appear to carry a warning label from Facebook.

March 5, 2020

The corona virus is large in size with a cell diameter of 400-500 micro, so any mask prevents its entry so there is no need to exploit pharmacists to trade with muzzles.

The virus does not settle in the air, but on the ground, so it is not transmitted by the air.

The corona virus, when it falls on a metal surface, will live for 12 hours, so washing hands with soap and water well will do the trick.

Corona virus when it falls on fabrics stays for 9 hours so washing clothes or exposing them to the sun for two hours is enough for the purpose of killing him.

The virus lives on the hands for 10 minutes so putting the alcohol sanitizer in the pocket is enough for the purpose of prevention.

If the virus is exposed to a temperature of 30 - 40°C, it tends to persist for a shorter time, it does not live in hot areas. Also drinking hot water and exposure to the sun is good enough.

Stay away from ice cream and cold food is important.
Adhering to these instructions is sufficient to prevent the virus.

Stay safe !

👍 585   💬 84   ⤴ 662

Facebook post from a national-level politician in Fiji repeating a series of false claims that also circulated in other parts of the world.

July 29, 2020

Covid-19 is not a virus but it's a 5G-bacteria!
#toksave

👍 776   💬 400

Post sharing falsehoods about Covid-19 in a Papua New Guinean Facebook group with more than 90,000 members. Responses are a mix of skepticism, confusion, abuse, and references to other conspiracy theories.

Covid-19 conspiracy theories also find a home in Pacific Facebook communities. Fear of 5G networks has spiked in the region – even where 5G network infrastructure is not currently available.[12] Google search data shows a notable spike in searches for "5G" in Fiji in April, and false accusations against Bill Gates' philanthropic projects also proliferated around the same time.[13]

In rare cases, news about specific patients from the Pacific reaches the international press, thereby linking false claims or theories from abroad directly to Pacific individuals. One notable example of this phenomenon comes from Fiji, where Indo-Fijian communities on Facebook and WhatsApp are also exposed to Hindi-language news, including some reporting on Covid-19. When one of the first Covid-19 patients in Fiji was revealed to have visited a large Muslim gathering in India prior to his return to Fiji, the subsequent accusations against this individual included false allegations that he had spit on hospital staff in an attempt to spread the virus, directly referencing similar false claims made against Muslims in India and false reports spread in the Indian press.[14]

GOOGLE SEARCH INTEREST, FIJI
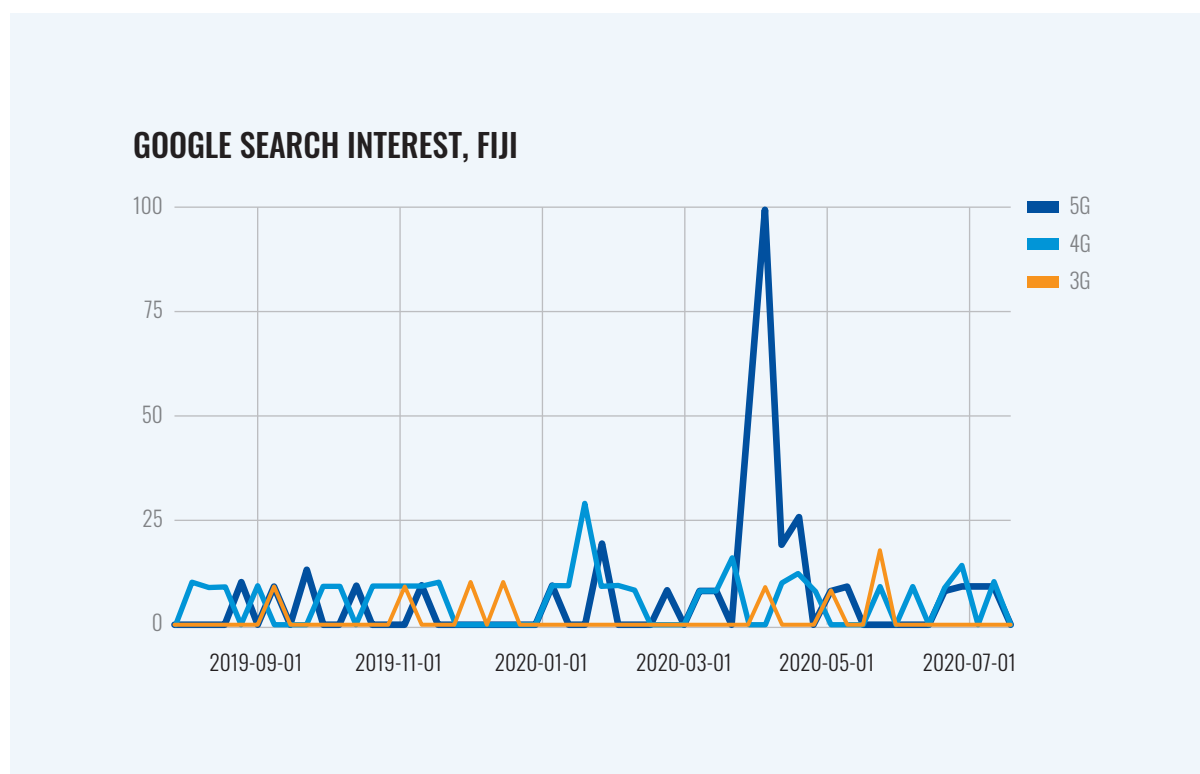
Google search interest in "5G" among Fijian internet users shows a spike in April 2020. Interest in "3G" and "4G" showed no visible change.

Locally-generated or locally-reconfigured Covid-19 misinformation

In addition to international material, much of the false information about Covid-19 in the region is created or reconfigured to reflect particular regional or local traditions, biases, and beliefs. Toward the beginning of the outbreaks in the Western world, many social media commenters in Melanesia expressed a belief that their community would have an inherent immunity or resistance to the virus due to their genetic makeup, skin color, traditional diet, or simply due to exposure to many other diseases over the course of years. While scientists do not currently have definitive answers as to why some countries see outbreaks and some do not, most of these claims of local immunity would fall into the realm of questionable or entirely false information that could negatively affect citizens' assessment of risk and willingness to follow public health guidance. False or unproven information spread on social media about cures and treatments for Covid-19 can be even more harmful, should an outbreak occur in the Pacific. For example, many Micronesians (especially Pohnpeians) treat various illnesses with a method called *umwulap*, which involves boiling the leaves of a local plant and inhaling the steam. Similar kinds of steam treatments are used around the world, and claims that they can cure or treat Covid-19 have been rated "false" by fact-checkers and marked as "false information" on Facebook.[15] However, many posts claiming *umwulap* as a Covid-19 "cure" remain on Micronesian Facebook groups, with no warning labels.

April 17, 2020

Question: Can heat therapy (umwulap) cure Covid-19?

Answer: Until now, there is no cure for Covid-19. The use of alternative remedies such as heat therapy (umwulap) may help in easing some symptoms according to some private witnesses. No scientific research has supported this claim. Easing of some symptoms is not curing the infection. It is very irresponsible to ignore social distancing guidelines thinking that heat therapy can cure you. It may help with some symptoms but relieve of symptoms is not cure.

👍 119   💬 145   ⤴ 31

An administrator of one of the largest Facebook groups for Micronesians wrote a post fact-checking the widely-held belief in *umwulap* as a treatment for Covid-19. The Pohnpei State Public Health Division supported this message in a response below it, but most other comments are dismissive of science and defensive of their traditional practice.

Religion commonly affects discussion of the Covid-19 pandemic, sometimes blurring the lines between benign messages of encouragement and potentially dangerous misinformation. Many of the most active Facebook groups in the Pacific center around religion, and faith-based posts related to the pandemic are very common. Religious messages also flow into Pacific social media communities from abroad, including large churches and charismatic religious leaders from the United States, Africa, and Southeast Asia. Most of these messages preach strength and resolve in the face of adversity.[16] However, some users in countries with few or zero Covid-19 cases have tended to attribute the absence of positive cases to a kind of divine protection, or to the power of prayer. For example, commenters in Papua New Guinea frequently espoused the belief that as a "Christian nation," they would be spared the effects of the virus. While these narratives do not fit neatly into the frame of "misinformation," dismissal of the virus' threat or reliance on prayer over medical advice does have the potential to cause harm.

March 19, 2020

MUST READ!!!!!!
Thank you PM for giving this country to God. If this virus can affect the entire world, then definitely it will come into PNG despite how hard we try. But, because you have dedicated this country into God's hand, I believe God will not let this country down by letting the Virus spread in PNG. It needs a supernatural or divine power to stop the entrance of this virus into PNG, because try and have a look at those powerful countries in the world have already gotten the Virus and people are dying. We PNGeans are nothing, but God will fight for us because PMJM has already dedicated this country into God's hands. So we don't have to fear or panic because this country does not belong to you and I, it belongs to God. God will take control. I believe God is trying to lift PNG to the top rank of the world, so try imagine, it will be a legacy of World's history if PNG has no Covid-19 while the rest of the world has it uncontrollable. It's not because of us, it's because God is the owner of PNG so how can Covid-19 enter PNG?

👍 875   💬 167   ⤴ 11

Message shared in at least two different Facebook groups in Papua New Guinea with roughly 100,000 members each. Most responses are supportive, or simply say "Amen."

March 23, 2020

Man Vanuatu traem Tingbaot:

Evri nata country Oli kat stret season Blo flue nomo be yumi?? Leftemap Han evriwan we Oli sta Kasem flue klosap evri manis?? ✋ ✋

Mi personally Neva harem man Vanuatu I ded lo influenza be lo wol 650 thousand man I ded evri yia from simple flue.

I rare Blo Luk man Vanuatu I Kasem allergies be lo Nata county hemi wan common thing.

Yumi no immune lo Covid-19 but we're definitely stronger right?? Yu jikim fresh kakae, fresh fruits Mo ol lokol Mersin Blo Yumi bakeken??

I orait Blo wari, I nomol Blo fraet be yu no doubt!! Corona virus ba I no winim Yumi!! 💪💪

Have faith, coz faith can move mountains!!

👍 if you agree!!

👍 1.1K   💬 333   ⤴ 7

Post shared in a large Vanuatu Facebook group with over 100,000 members. Writing in the Bislama language, the poster claims that Vanuatuans rarely have allergies or die from the flu, and due to their diet, they will be stronger than others if they get Covid-19. Responses to the post are overwhelmingly supportive.

Misinformation and theorizing about government responses

In interviews for this report, many government officials expressed frustration in the multitude of false claims online that were critical of the government's handling of the crisis. These included allegations about the validity of test results, false reports around flights bringing infected individuals or equipment, and suggestions of ulterior motives behind curfews and lockdowns. This may reflect a global trend: a study of English-language fact-check articles by the Reuters Institute and Oxford Internet Institute found that the most common false claims were about government measures.[17]

In the Pacific, significant government bandwidth is taken up in responding to these accusations. Across the region, government information officers describe having to greatly increase the frequency of press briefings, news broadcasts, and social media posts in order to keep up with the flow of false information. The Tongan Ministry of Health attempted to respond to false rumors about incoming flights and border

quarantine measures by posting live videos on its Facebook page showing exactly how these flights arrived in the country. False claims about government measures were also a commonly-cited motivation for the decisions by government officials in Fiji, Tuvalu, and Vanuatu to engage directly with users in popular Facebook groups.

Some misinformation about government responses may in fact be the result of governments' unwillingness to provide reliable and credible information in time and in accessible formats, thus leaving a vacuum in which rumour and misinformation can thrive. But the efforts by governments to respond to this variety of misinformation actually point to a potential positive outcome of the pandemic: politicians and bureaucrats have had to get better and quicker at providing information to the media and the public.

Ostracization and harassment

The priority placed on contact tracing during the pandemic has at times led government leaders to accidentally expose Covid-19 patients (or suspected patients) to harassment on social media. In Fiji, the first person to test positive for the virus attended a Zumba class before his condition worsened and he went to the hospital; though he was not named, the Ministry of Health and Medical Services posted a list of the other Zumba class attendees on their Facebook page, calling them to come forward for testing.[18] In Samoa, a woman who was tested for Covid-19 was named in the local media and her home village was revealed by the Prime Minister in a radio broadcast – before her test ultimately returned a negative result.[19] The second Papua New Guinean national to test positive for the virus, a woman from East New Britain province, also had her name leaked to the media.[20] All of these individuals, as well as their families and associates, were harassed on social media.

2. RESPONSES TO THE INFODEMIC

The landscape of online Covid-19 information the Pacific

This section briefly summarizes the sources and distributors of online information during the Covid-19 pandemic, including who the various stakeholders are and what they are contributing to the online information ecosystem.

Government information portals – Many governments in the Pacific use their official web presence to share situation reports and guidelines for the Covid-19 pandemic. Due to the range of e-government capacity in the region and differences in roles and responsibilities of each institution, these websites take a variety of different forms. Some governments have built new sites specifically for Covid-19: for example, Vanuatu, Papua New Guinea, and Cook Islands created new stand-alone pages for the pandemic hosted at custom domains, which they update regularly with verified case numbers and advice for staying safe. Other governments, including Tonga, Samoa, Palau, Solomon Islands, and Kiribati, post updates on pages for the Ministry of Health or National Disaster Management offices. A few countries and territories that operate only a single whole-of-government site, such as Nauru and Federated States of
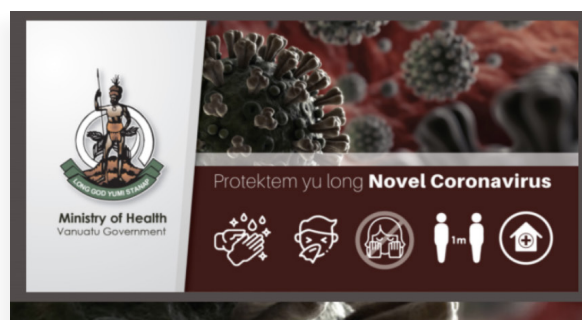
The Vanuatu government created a Bislama-language information portal and made it available for zero data costs.

Micronesia, post updates on those main pages. Government websites at the sub-national level are rare in the region.

As of July 2020, Fiji was the only Pacific island country with a mobile contact tracing app. The careFIJI app is based on the open-source BlueTrace protocol developed by the Singaporean government, which uses Bluetooth to log encounters between users.[21] The relatively small number of people who have downloaded the app so far may limit its utility.[22]

Official government social media pages – Facebook is widely used in the Pacific, and governments often find that creating a profile on the platform is an even easier and more effective way of reaching people than updating an official website. Ministries of Health, Prime Ministers' offices, national disaster management agencies, and national police forces have all used Facebook pages to share information on the Covid-19 pandemic in much the same way that Facebook pages are used to post updates on cyclones, earthquakes, and other crises that the Pacific faces. As with government websites, official social media profiles are useful ways to streamline messaging and get updates to people quickly and cheaply, especially when it is necessary to combat false rumors spreading on the same platform.

Advertising provides another way for governments to spread a message on social media. The Ministry of Health in Tonga was able to work directly with Facebook to create free advertisements on its platform that elevated the visibility of important public messaging, enabling the government to communicate with nearly all Tongans with Facebook accounts rather than just the 8500 people who follow their page.

Selected examples of of government information online:
- The Tongan Ministry of Health posts regular Covid-19 updates in a variety of formats on its Facebook page.[23] Official daily briefings are usually streamed live, and written updates are posted in Tongan and English.
- Tuvalu, which does not have its own public-facing government website, uses Facebook pages for the Tuvalu Government Media and the Ministry of Justice, Communication, and Foreign Affairs to post local-language updates and videos of press briefings.[24]

- The Fiji Ministry of Health and Medical Services posts frequent updates in English.[25] Officers from the Fiji Police Force operate the "Cyber Safety Fiji" page, which offers advice on how to avoid online scams, misinformation, and phishing attempts related to Covid-19.[26] The Online Safety Commission's page provides anti-cyberbullying and anti-misinformation messages, tips, and advice.[27]
- The Cook Islands government created a dedicated Facebook page for the Covid-19 pandemic, where they post "mythbusters" and news (in English).[28]
- Papua New Guinea has created pages for the Department of Health and the National Control Centre for Covid-19.[29] Posts on both pages are almost always in English.
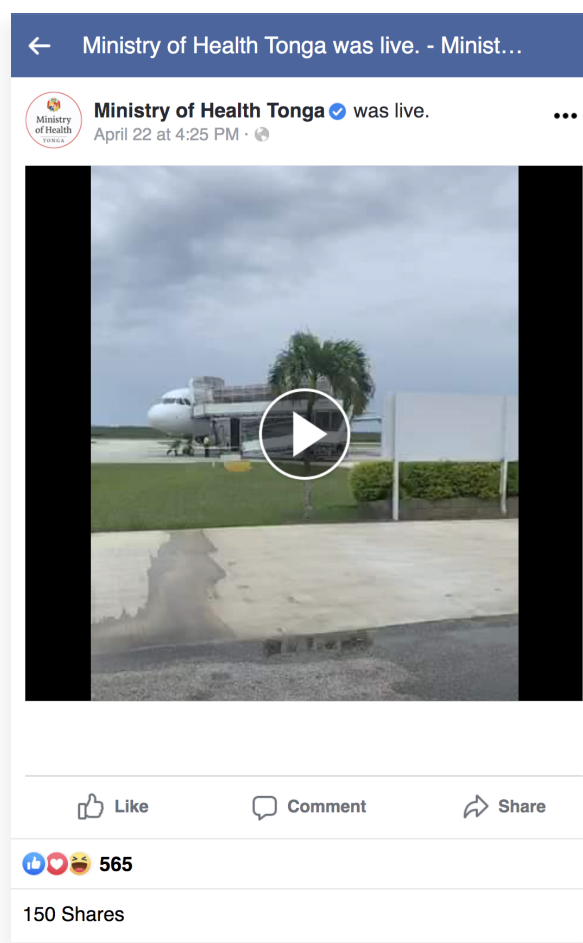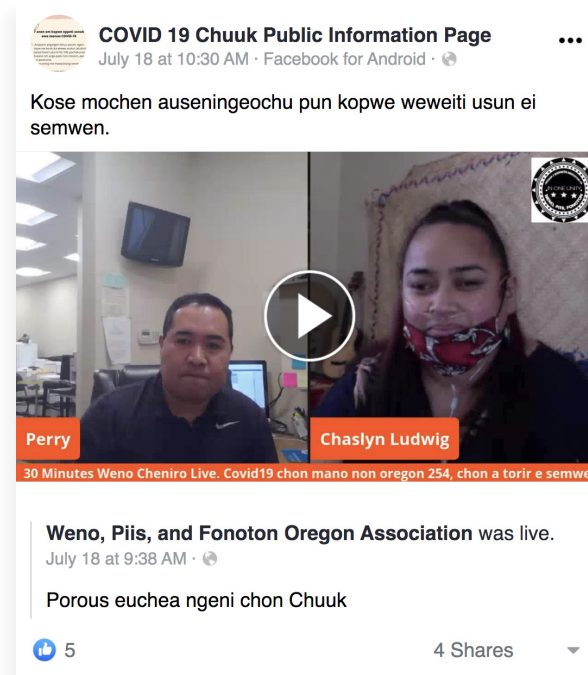

The Ministry of Health in Tonga posted a livestream on Facebook showing the arrival of a repatriation flight.

Police, online safety, and cybersecurity authorities – Security forces and cybercrime authorities are also involved in responses to online misinformation during the Covid-19 pandemic. These include awareness-raising and public information-sharing initiatives, but also more punitive approaches to stemming the tide of misinformation. Under state-of-emergency orders and existing cybercrime and public order legislation, police forces in many Pacific countries have relatively broad powers to arrest and prosecute individuals who spread false content online that is likely to incite violence or cause public harm. In addition to legal processes, police in some countries, including Fiji and Vanuatu, also work directly with liaison officers at technology companies (especially Facebook) to remove dangerous content and shut down accounts or groups that consistently spread false and harmful information.[30] These channels, which were set up in recent years to handle reports of cyberbullying and harassment, are also used to remove dangerous and false content related to Covid-19.

Health sector – Community health workers (CHWs) play a crucial role in extending public awareness of diseases and delivering essential services in the Pacific, especially for common chronic illnesses and non-communicable diseases. CHWs are ordinary community members – not doctors or nurses – though they do receive short training courses and sometimes a modest salary for part-time work. CHWs' digital literacy is generally low, mirroring that of their communities.[31] Until the end of 2019, the Pacific Open Learning Health Net (POLHN) provided a range of online training resources for CHWs and other health professionals in the region, but

The Chuuk Community Health Centers established a Facebook page for sharing Covid-19 announcements and advice in English and Chuukese.

the system is now offline and its domain name registration has expired.[32] U.S.-affiliated Pacific islands (American Samoa, Guam, the Northern Mariana Islands, Palau, Marshall Islands, and Federated States of Micronesia) benefit from some support from the Pacific Islands Health Officers' Association, which links health officials from these countries to resources and materials from the U.S. Centers for Disease Control and Prevention.[33]

Online information-sharing and outreach by health workers in the Pacific during the Covid-19 pandemic has been largely ad-hoc. In a few cases, alignment between national task forces, international experts, and digitally-savvy community health workers led to more credible information being shared online. For example, in Federated States of Micronesia, the Chuuk State Covid-19 task force and the WHO recommended that the Chuuk Community Health Centers establish a Facebook page for sharing Covid-19 announcements and advice.[34] In other cases, individual doctors and health officials took to social media to explain what they knew about Covid-19, sometimes with the backing of national government entities, and sometimes in violation of government rules against unapproved communication on the pandemic.[35] However, most health workers have either been hesitant to share information unilaterally or are unsure how to communicate complex and uncertain scientific concepts to a lay audience.

Media sector – Local media organizations in the Pacific are attempting to provide coverage of the Covid-19 crisis despite funding shortfalls, movement restrictions, and laws that may limit their ability to report on the pandemic. Some broadcasters, like EMTV in Papua New Guinea, added more daily newscasts in order to respond to the constantly-evolving situation. The influence of Pacific television broadcasters and newspapers extends to social media as well, where their accounts are some of the most-followed pages on Facebook, for instance. Local media is supplemented by coverage from international providers, especially ABC (from Australia) and RNZ Pacific (from New Zealand), which provide local-language broadcasts in larger markets like Papua New Guinea.

Media sector capacity-building has been more difficult during the pandemic, due to travel restrictions, but it continues with support of international donors. The WHO supported training for Covid-19 coverage for the Palau Media Council.[36] ABC International Development (ABCID), a division of the Australian Broadcasting Corporation, operates several training and research programs in the Pacific through the Pacific Media Assistance Scheme (PACMAS). PACMAS has been running an important series of reports titled "Curb the Infodemic" to showcase findings from its social media monitoring and analysis to uncover the key themes in Covid-19 discussions on Facebook and Twitter in the Pacific.[37] These findings are presented to local media organizations in order to inform reporting on the pandemic. PACMAS also supports the secondment of Covid-19 information officers to Pacific governments and works with other regional organizations to strengthen the quality of information and news, including online sources.[38]

Regional and intergovernmental bodies – Regional and intergovernmental cooperation is a necessity in the Pacific due to the small populations and limited number of technical experts distributed across the region. The Pacific Islands Forum (PIF) is the primary regional political and economic grouping; its members include 18 Pacific member states including Australia and New Zealand. PIF established the Council of Regional Organisations of the Pacific (CROP) to promote cooperation between various stakeholders, with several working groups focused on cross-cutting issues including ICT.[39] In responding to Covid-19, PIF invoked its crisis response framework to facilitate the development of shared protocols for the deployment of technical personnel, customs and biosecurity, immigration, repatriation, and clearance of planes and ships under the "Pacific Humanitarian Pathway on Covid-19."[40] So far, the PIF's activities have focused on these urgent issues related

to the transfer of people and equipment, rather than cyber issues, and the CROP ICT Working Group has not been an active component of its response. However, the Boe Declaration, adopted by PIF leaders in 2018, makes cybersecurity one of five strategic areas, opening the door to possible collaboration on cybersecurity issues in the future. [41]

The Boe Declaration is the most recent statement on regional security. It was signed by all members of the Pacific Islands Forum in 2018. Included in the current and emerging threats that it identifies for the region is that of cybersecurity. As the implementation of the Boe Declaration is rolled out at national and regional levels, it may be that the impacts of misinformation and disinformation activities related to Covid-19 will inform how cybersecurity responses develop.

Global intergovernmental agencies including UNICEF and the WHO provide Pacific communities and governments with some technical assistance and informational materials that help their response to Covid-19. The WHO has coordinated the Covid-19 Joint Incident Management Team (IMT) offering strategic support to the Pacific region, which includes efforts to counter rumors and misinformation through enhancing public awareness communications.[42] Graphics, videos, and updates from WHO and UNICEF websites and social media profiles are commonly shared within the region, especially by government agencies. In some cases, they are localized in more widely-spoken Pacific languages such as Tok Pisin and Bislama, using templatized formats. More often, they are simply shared in English. The International Organization for Migration (IOM) supports risk communication and community engagement, including through social media and online channels, in Yap and Chuuk (Federated States of Micronesia) and Marshall Islands.[43]

The Pacific Community (SPC), a development organization owned and operated by its 26 member countries and territories, has provided technical assistance to Pacific countries in responding to Covid-19, especially in the routing of equipment and sharing best practices from the international community. The SPC has been an important conduit for risk communication, awareness, and medical training materials developed by the WHO, UNICEF, IOM, and other global bodies.

For technical issues related to internet governance and network maintenance, other organizations and groupings including the Asia-Pacific Network Information Centre (APNIC), the Pacific Network Operators' Group (PacNOG), and the Pacific Cyber

Security Operational Network (PaCSON) have supported regional coordination and dialogue on the effects of the Covid-19 pandemic, including increased cyber risk and bandwidth demands due to the sudden shift to remote work and education.

Regional/local NGOs – NGOs and development actors in the region have taken an active role in Covid-19 response, including addressing related issues such as the increase in gender-based violence during the pandemic.[44] Most of the work led by local NGOs is traditional offline awareness-raising and community education food distribution in remote and underserved communities.[45] For many local NGOs in the Solomon Islands, Vanuatu, Fiji, and Tonga, responding to the aftermath of Tropical Cyclone Harold overtook Covid-19 as a priority in April and May. Other NGOs, including World Vision and the Red Cross, use social media (especially Facebook) to share messages about Covid-19 safety, in addition to traditional offline work.[46] Wan Smolbag Theatre, a grassroots NGO in Vanuatu, produced a series of highly engaging Bislama-language videos on Covid-19 safety and awareness that were also approved and disseminated by national government authorities online and on social media.[47] But many NGO leaders in the region say that it is still difficult for their staff to effectively combat false and harmful rumors that spread through social media, simply because of how quickly and widely these messages are spread.[48]

Prominent individuals – In the Pacific's small and tight-knit communities, much of the public messaging online comes not from official channels, but from prominent individuals who use their social media presence to provide information in a more accessible, colloquial, or credible way. The effects of this practice are mixed: while it does accelerate the delivery of information and can more quickly shut down false rumors, there is a serious risk of miscommunication as personal messages from government officials are interpreted as fact.

Even in larger economies such as Papua New Guinea, individual voices are often the loudest and most influential online. Bryan Kramer, currently the Minister for Police, maintains a personal blog on Facebook with almost 130,000 followers as well as a personal account with more than 70,000 followers. Kramer uses his profiles to post lengthy analyses, explanations, and even critiques of government measures to control Covid-19. Other well-known PNG politicians, including Oro Province governor Gary Juffa, East Sepik Province governor Allan Bird, and Prime Minister James Marape also use their large personal followings on Facebook to share updates in text, video, and image formats.

Religious communities – Pacific religious communities are very active in civic life, as well as in health and wellness communication. During the Covid-19 pandemic, religious leaders have been important sources of information and guidance for congregants, and online discourse often draws religious parallels or faith-based meaning from news about the pandemic.

In some countries, including Tonga, public health officials have leveraged the high trust placed in religious leaders to spread awareness of preventative measures and social distancing guidelines in coordination with churches. The Pacific Conference of Churches, an ecumenical organization representing churches and councils of churches in 17 Pacific countries and territories, is working to counteract faith-based misinformation spread by a few religious leaders (including that it is a "punishment" for sin) by making statements to the press and providing informational materials to member churches.[49] In a rare high-profile case, an outpost of a cult-like Korean church promulgated Covid-19 misinformation in the Fijian print media and on Facebook, but the response to this was overwhelming public backlash.[50]

Ethnolinguistic and diaspora communities – Other important social media communities are organized around ethnic, linguistic, and diaspora networks. These include provincial, subregional, or even village-level groups in Papua New Guinea, which link networks of individuals all over the country who share a common language and heritage; diaspora communities from Tonga, Tuvalu, Micronesia, and the Marshall Islands; forums specifically for speakers of Fijian or Fijian Hindi, and many more. Ethnolinguistic, village-based, and diasporic communities on Facebook, Messenger, WhatsApp, and Viber are important connectors between rural, urban, and overseas communities, and they facilitate a huge amount of information flow.

As Covid-19 cases have risen in the United States, diaspora groups for Marshallese, Micronesians, i-Kiribati, and others have increasingly hosted first-hand accounts of the pandemic, which is disproportionately affecting U.S. Pacific Islander communities.[51] While these stories may reduce the tendency to dismiss the threat of the virus in some countries, health officials in other places, such as Tonga, are concerned that their compatriots overseas contribute too much false or questionable information about the virus, in their attempts to keep relatives at home informed and raise their own status within the community.

Other informal Facebook groups – Besides ethnic and religious communities, Pacific internet users also congregate in large Facebook groups with a variety of other organizing principles, often implicitly or explicitly political. These groups may contain anywhere from a few thousand to over one hundred thousand members and see hundreds of posts per day. During the Covid-19 pandemic, the topics of discussion in these groups have naturally shifted to include Covid-19 and government response measures.

The relationship between popular Facebook communities and Pacific governments is complex. Groups like the "Fiji Exposed Forum," "Yumi TokTok Stret" (Vanuatu), and "Forum Solomon Islands – International" – as well as their many spin-off pages – are known for impassioned political discussion and direct criticism of the government.[52] While some political leaders react negatively to these groups, others actively participate in them. During the Covid-19 pandemic, these and similar groups were often identified as sources or promulgators of misinformation (especially anti-government misinformation). Government officials from Fiji, Tonga, Vanuatu, Tuvalu, and other Pacific countries also described participating in these groups in order to share correct, verified information and report falsehoods. In Fiji, police officers began engaging directly with users in these forums to share official reports.

Groups specific to Covid-19 have also appeared in response to the pandemic. Many of these groups provide relatively high-quality information sourced primarily from official outlets. For example, two Solomon Islanders, the doctor Claude Posala and the journalist Dorothy Wickham, created the "Island Health" group to share news and updates relevant to the region.[53] In Fiji, a tourism company owner created the "Fiji CoronaVirus Awareness Community," which has grown to over 36,000 members.[54] In Papua New Guinea, the "Covid-19 PNG" group, with over 16,000 members, officially prohibits conspiracy theories and the moderators attempt to remove false material about 5G networks or other misinformation.[55] Anecdotally, closed groups on Facebook and popular messaging platforms (especially WhatsApp and Messenger, both Facebook-owned products) are described as important and very active sources of both true and false information about the pandemic, but tracking these groups in much detail is almost impossible without violating members' privacy.

Public diplomacy – During the Covid-19 pandemic, medical aid has been one of the ways that other countries promote their soft power in the Pacific. China has announced donations of equipment to Fiji, Tonga, Papua New Guinea, Vanuatu, Samoa, Kiribati, and the Cook Islands. Taiwan contributed aid directly to Malaita Province in the Solomon Islands, Tuvalu, Nauru, the Marshall Islands, and Palau.[56] The U.S., Australia, and New Zealand have also donated to most countries in the region. For each donation, donating embassies and recipient leaders usually post announcements on social media.[57] In addition, several embassies retain active Facebook pages where they post other updates on their country's Covid-19 response. Among these, the newly-established Chinese embassy in Kiribati is a rare case of an embassy that posts primarily in the local language, rather than only in English.

Local private sector and technical communities – Within the local private sector, telecommunication companies in the region possess various existing channels for broader public outreach in the region. For instance, Telikom PNG has offered a range of support services to the National Department of Health, which include launching an on-air "Covid-19 Helpline" during the FM100 Talk Back Show, and setting aside regular weekly airtime for NDoH to raise public awareness.[58] Internet service providers and other telecommunications infrastructure providers worked quickly to support their customers' transition to remote work, particularly for government agencies and healthcare institutions.[59] Local technical communities played a key role in supporting rapid adaptation to the pandemic, including handling large increases in bandwidth demand and internet exchange point (IXP) traffic. Computer emergency response teams (CERTs), expert groups that monitor and respond to cyber threats, were also active in passing on reports of phishing attempts and other cyber attacks that exploited fear of Covid-19 to harvest user data and disrupt networks.[60]

RETHINKING SOCIAL MEDIA CONTENT MODERATION

During the pandemic, social media has provided people with a vast amount of information - both false and true - about Covid-19. The potential life-or-death consequences of this information have placed higher expectations on the companies that operate social media platforms to verify and remove false and harmful content faster and more aggressively.[61] Major platform companies like Facebook (including Facebook subsidiaries like Messenger, Instagram, and WhatsApp), Google (including YouTube and the Play Store), Twitter, Reddit, TikTok, Snapchat, Pinterest, and WeChat have worked with national and global health authorities to amplify official messages when users search for Covid-19 related keywords, block posts and advertisements that contain false or exploitative content about the virus, and improve artificial intelligence systems to better detect false and harmful content.[62] Facebook announced that users would receive a notification in their News Feed along with a link to the WHO's MythBusters page if they had prior interactions with content marked as "harmful misinformation."[63] TikTok added a specific category in its in-app reporting for "Covid-19 misinformation," which allows users to send content to a "priority moderation queue."[64]

Platform companies also rely on third-party fact-checkers accredited by the International Fact-Checking Network (IFCN) managed by the Poynter Institute, which has also begun cataloguing falsehoods debunked by network members around the world.[65] To boost this resource, Facebook and IFCN jointly launched a $1 million grant program that has funded projects across the world offering "translated fact checks" and "debunked content" as well as helping public authorities access reliable information for better communication about Covid-19.[66] YouTube expanded its fact-check information panels, where search results include fact-checked articles from vetted publishers.[67] YouTube also offered $1 million through the Google News Initiative to the IFCN.[68]

These efforts have had mixed results. For instance, researchers found significant delays and oversights in the issuance of warning labels on misinformation related to Covid-19 on Facebook, especially in non-English languages.[69] Facebook's decision to deliver an intentionally vague message to users who interacted with false Covid-19 content - rather than pointing out what exactly was false - was also criticized.[70] Overall, though, the Covid-19 pandemic has caused social companies to invest more heavily in content moderation and content contextualization than ever before. For this reason, dozens of prominent organizations, institutions, and researchers concerned with online safety and digital rights have urged these companies to commit to transparency measures that would allow civil society to better understand the effects of these measures and how to apply the lessons of experience to future information crises.[71]

Challenges in online information-sharing during the pandemic

Making official information, accessible, credible, and consistent – The urgent needs created by the pandemic have inspired governments to change their communication strategies. Pacific governments are sharing information more regularly than before and using online channels (especially Facebook) in new ways, including through regular live video broadcasts and advertising. But officials still encounter difficulties disseminating official, credible information to citizens in more remote areas, or to citizens with lower digital literacy.

Government information portals are important resources for people seeking authoritative data and guidance and can help ensure verified messaging reaches journalists and the public.[72] However, except in a few cases, Pacific government websites are not designed for the average Pacific internet user. They are often written mostly in English, rather than local vernaculars; they are not optimized for low-bandwidth environments; and they are sometimes designed for desktop computers rather than the smartphones that most people use to get online. Vanuatu's Covid-19 information portal is a notable exception: in addition to a page in English with more detailed information and situation reports, the government created a simpler page entirely in the Bislama language that is provided for zero data costs. The page also displays a video by Wan Smolbag Theatre, a local theater troupe, that was commissioned by the Ministry of Health to demonstrate proper hand-washing.

On social media, the impact of information posted by Pacific governments is limited when it is not obviously verifiable and credible – in other words, when users cannot easily tell if it is true or false when it appears in a news feed alongside hundreds of other posts about Covid-19. This issue is compounded by the tendency of individual officials to broadcast information on their personal pages, in their own particular style, rather than relying on official shared outlets. In Papua New Guinea, for example, leaders' tendency to use their personal Facebook pages (which are not marked as "verified") to share official information has caused confusion, since it is trivial for a malicious actor to create a duplicate profile with the same name and profile picture. In April 2020, around when the first wave of Covid-19 cases appeared in the country, Prime Minister James Marape was the subject of this type of hoax: users created a fake page under his name and posted messages that were critical of other government leaders. The posts were quickly shared as links or screenshots, forcing Marape to release a statement clarifying that it was not actually his account.

James Marape
April 19, 2020

PNG please check what's in social media properly before you comment or share; many are fake news by people with vested interest.

Example like the fake 'James Marape' account yesterday that released some politically sensationalized message.

My leadership is comfortable to allow my colleague leaders who are my equals in Parliament to speak their mind on any and every issue.

We are here not to suppress correct public commentaries from politicians and citizens. But we will not tolerate peddling of fake, malicious and incorrect public releases.

On Corona Virus, we want to restore country back to life at the earliest including education, and we tidying the 'life with C19' protocols and living with Corona for the rest of the year.

Have faith, your God Yahweh is alive and your Government is at work. By the way some results of those of us who got tested from Morauta house last Thursday, our results came back negative from C19.

The work continues for those five positives cases to ensure their impacts and their cure is attended to.

Let's work! I am at work, it's a new work week, Corona must not kill our lives or our economy.

PMJM.

👍 2K   💬 318   ⇗ 232

Prime Minister James Marape called out fake Facebook accounts using his name to spread "politically sensationalized" messages.

Though users can sometimes identify fakes by the number of followers or the page URL, government leaders can reduce the risk of this happening by "verifying" their accounts – which adds a blue check mark as a visual signifier – or by using official accounts that are not in an individual's name.
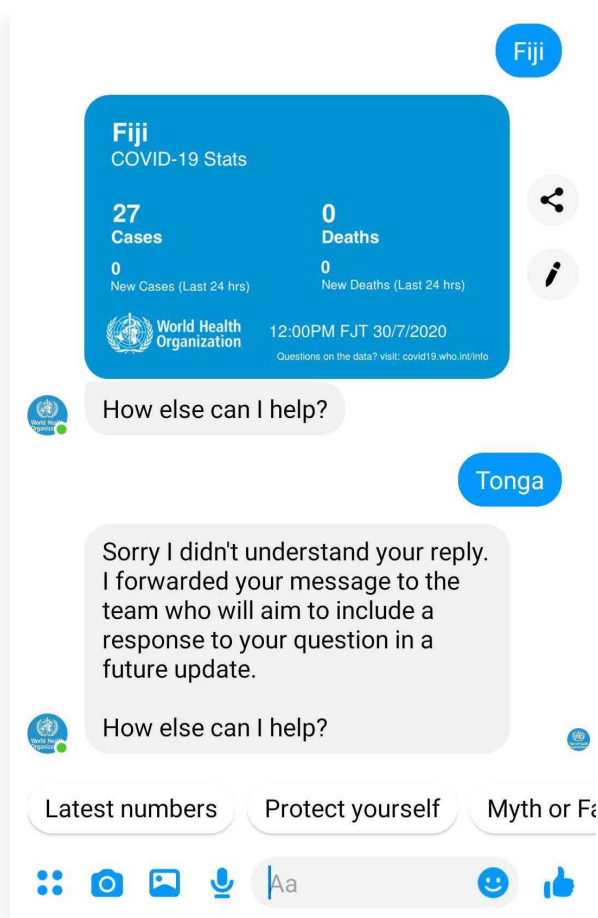
WHO's official chatbot omits Pacific countries with no cases to date.

Official information can also come from global bodies, such as the UN and WHO. But while efforts by these groups to debunk falsehoods and convey accurate information online about Covid-19 are nominally inclusive of the Pacific, they often fail in practice. For example, the Facebook chatbot service provided by the WHO is designed to show current Covid-19 case numbers for any country, but due to an error in its coding, it fails to recognize Pacific countries and territories that have zero cases to date.[73]

Individuals have an outsized impact – In countries and territories with small populations, many people get their information from Facebook friends who are also civil servants. People with early access to official Covid-19 updates use this information to raise their profile, and "jokes" and criticism by these individuals can muddy the waters. In addition, while leaders can provide a genuine public service by using Facebook to engage with citizens and clarify government actions, confusion arises when their messages clash. This was an issue during the early stages of the Covid-19 pandemic in Papua New Guinea, when the Prime Minister, the Police Minister, and the Health Minister (who has a much smaller online following) appeared to contradict each other regarding the first positive test results.[74] Mainstream media outlets that publish their remarks can find themselves being criticized or undermined when an official walks back or changes an informally published message.

In other cases, individuals who shared premature, inaccurate, or misleading information online about the Covid-19 pandemic were chastised or even fired for their actions. Claude Posala, a prominent doctor in the Solomon Islands, lost his job for posting "misinformation" about government actions, including sharing documents that were not meant for public viewing.[75] In Nauru, an official in the

national emergency services department was disciplined for sharing an "April Fool's" joke on Facebook suggesting that there was a case of Covid-19 on the island – the post was interpreted as fact, causing brief public confusion.[76]

Punitive approaches to online misinformation cause collateral damage to media – Government controls on media that were initiated through state-of-emergency orders (or even earlier), as well as declining advertising revenues, have hamstrung Pacific media outlets and reduced the overall availability of information during the Covid-19 pandemic. Media houses are struggling to retain staff, and in some cases are not granted access to briefings or interviews that could help them communicate important issues to the public.[77] This places a greater burden on the government to convey messages to people, and also cuts out explanatory reporting and contextual nuance that the media is often in a better position than the government to provide. Media organizations in the Pacific have frequently pointed to punitive cybersecurity and online safety laws, as well as general distrust between governments and media, as major obstacles in their work; the ratcheting up of these laws during the pandemic have made editors and reporters even more concerned about the future of the industry.

Since social media platforms rely on independent media organizations to provide integrated fact-checking services, a weak or restricted media environment in the Pacific also prevents the region from being included in anti-misinformation efforts initiated by social media companies during the pandemic. Facebook relies on third parties to correct falsehoods on its platform; currently, it has identified the Australian Associated Press as its fact-check partner for Pacific island countries (in addition to Australia).[78] But very few of the AAP's fact-checks for Covid-19 misinformation are actually unique or specific to Pacific island countries. Without a strong fact-checking organization focused on the region, Pacific social media users are missing one of the major safeguards that platforms rely on to strengthen information ecosystems.

3. OTHER EMERGING RISKS

Geopolitical pressures and digital propaganda – Pacific island countries and territories face emerging risks from a geopolitical battle for Covid-19 narratives as competition for influence in the region grows. During the Covid-19 pandemic, China, Taiwan, Australia, the United States, and other foreign powers have ramped up their information-sharing, medical donations, and media outreach to the Pacific region.[79] In addition to genuine humanitarian support, the politicization of Covid-19 narratives have unfortunately amplified some false and misleading claims that complicate efforts to counter misinformation.[80] Independent researchers tracking global English-language online discourse have also found evidence of coordinated state-backed efforts that use both overt and covert means to plant narratives about Covid-19 on social media, including false claims about the virus's origin.[81] These efforts to shape the pandemic narrative through online manipulation or domination of online media should be of serious concern to Pacific stakeholders.

Local media outlets are important bulwarks against digital propaganda, but with growing resource deficits, this space is also more vulnerable to influence operations and less capable of responding to disinformation. The Pacific media sector has already been a space of strategic interest from foreign powers for several years – for example, Chinese state-owned media have began developing their own relationships in the Pacific for several years, supporting training in China for Pacific journalists, establishing content-sharing partnerships with local broadcasters, and expanding English- and French-language broadcasts on television, radio, and online.[82] In a move widely seen as an attempt to reassert soft power in the region and counter Chinese broadcasting, in May 2020 the Australian government announced it would make a slate of Australian television content available for free to seven Pacific island countries.[83] But without significant changes to enhance skills and capabilities within the local media sector, ongoing resource deficits will make it even easier for foreign powers, to exert influence over the Pacific information environment through both overt and clandestine means.

The narrative battles around Covid-19 bring uncertainties to short-term public response to the pandemic as well as long-term political dynamics within the region. Domestically, political leadership in Pacific countries and territories already face difficult decisions around how to manage competing interests from foreign powers. Even in countries that maintain ostensibly friendly diplomatic ties with China, attitudes toward China or locally-resident Chinese and Asian people have not always been positive. In Solomon Islands, for instance, the premier of Malaita

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Premier Suidani
June 8, 2020

PREMIER'S STATEMENT ON TAIWAN'S COVID 19 SUPPORT TO MALAITA PROVINCE

Monday 8th June 2020
Auki, Malaita Province

Ministers of the Executive, Members of the Malaita Provincial Assembly, the Provincial Secretary for Malaita Province, senior MPG officials, fellow Malaitans, ladies and gentlemen.

Today we are gather together to say thank you and share our sincere heart felt gratitude to our dear friend the Republic of China – Taiwan's Government and its generous people.

As we know the world is still at war with an invisible enemy that have claimed so many lives almost right across the entire globe. An enemy that has not only claimed lives but also brought colossal hardships to the many big and the small economies of the world.

This unprecedented pandemic have shaken the world to its core and have the world searching for answers and for a cure for the last 6 months. The Corona virus or the COVID 19 pandemic have awaken the world to re-examine many of the global arrangements that are put in place to facilitate the global economy for the progress and prosperity of mankind.

👍 199   💬 23   ⤳ 33

Excerpt from a statement by the Premier of Malaita Province, Solomon Island. The post included photographs of boxes of aid from Taiwan.

Province has been vocally opposed to the country's 2019 switch in allegiance from Taipei to Beijing, going so far as to establish a separate relationship between his own subnational government and Taiwan that enabled Malaita to receive a Taiwanese aid delivery in June 2020.[84] In general, many commenters on Pacific Facebook pages and groups remain openly suspicious or critical of China, especially reports of flights that deliver Chinese humanitarian equipment or personnel to countries with few or zero Covid-19 cases. When the news broke that China's first ambassador to the Solomon Islands had arrived in Honiara accompanied by dozens of Chinese workers, despite ongoing Covid-19 travel restrictions, Malaita's premier responded by threatening to hold an independence referendum for the province, and a local anti-Beijing political

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April 4, 2020

NO TO CHINESE TESTING KITS

I urge our government not to get testing kits directly from China. There is still uncertainty as to the origin of covid 19, whether it evolved naturally or man made is still unknown. Remember, the biggest virology lab in China is in Whuhan where the virus was first detected. Is this coincidence? I doubt it! The recent report from Britain that testing kits supplied by China were contaminated with corona virus also raises suspicion and must be a serious concern for every country affected by this pandemic. When one looks at it strategically, China has been spreading its influence all over the world. The belt and road initiative it has been rolling out since 2013 connects 70 countries from Asia, Europe and Africa back to China. PNG and other pacific island countries not covered by this initiative are tied to China through the infamous concessional loans. Now, the spread of covid 19 in the pacific has presented China with yet another opportunity. China will now use HEALTH to advance its dominance! It will want to be the first hand respondent. But to do this, first there must be a major outbreak in one of the island countries, and that is where the danger lies with Chinese testing kits.

👍 199   💬 23   ⤴ 33

Excerpt from a longer post in a major PNG political discussion group. The post contains multiple false and unverified claims about the origins and spread of Covid-19. Responses below the post are mostly in agreement with it.

group issued an evacuation notice for all Chinese businesses and citizens residing in the provincial capital.[85] Managing rising geopolitical tensions and strategic interests in the Pacific is not only an issue of foreign affairs, but also a matter of domestic political stability and societal harmony that can be easily upset by online misinformation and propaganda.

Local insecurity, anxiety, and conflict – There is no indication that Covid-19 will lead to major subnational conflict in the Pacific anytime soon, but the pandemic does create substantial challenges for the Pacific's political leadership in maintaining peace and security. The combined threats of the pandemic's health impacts, the economic blows dealt by quarantines and border closures, and the ongoing danger posed by climate change and natural disasters will only compound the insecurity and tension already felt throughout the region. Even in places with no observed cases of Covid-19 infection, communal anxiety about the pandemic manifests in discussions about repatriations of overseas workers, "travel bubbles" that would allow visitors from neighboring countries and territories, and imports of medical equipment and personnel.[86]

In other parts of the world, Covid-19 has inflamed conflicts between ethnic and religious groups and led to an increase in xenophobic or racist sentiments expressed online.[87] It is difficult to assess the extent to which the Covid-19 pandemic is currently heightening or reinvigorating social divisions in the Pacific, but fear and uncertainty related to the pandemic have certainly placed the region's traditional systems of communalism and mutual support under increasing strain. Over the past few decades, local tensions in Pacific communities have occasionally exploded into violence during separatist conflicts in Bougainville, Papua, and New Caledonia; riots that targeted Chinese communities and businesses in Nuku'alofa, Honiara, and Port Moresby; and cycles of tribal warfare and sorcery accusation-related violence in Papua New Guinea. There have been occasional spikes in online hate speech, including anti-Muslim hate in Fiji following the 2019 terrorist attack on two mosques in Christchurch, New Zealand.[88] During the Covid-19 pandemic, online discourse in the Pacific has sometimes echoed the themes that drove past violence, including xenophobia, religious and ethnic tension, and political accusations against both the government and the opposition. The risk of these tensions triggering real-world violence should be closely monitored by the region's leaders.

Vaccination – Recent outbreaks of vaccine-preventable diseases in Samoa, Papua New Guinea, and other countries in the region suggest uneven immunization coverage and rising vaccine hesitancy.[89] Social media has been identified by local and international authorities, including UNICEF, as a driver of this trend.[90] When a Covid-19 vaccine becomes available, ensuring coverage within the Pacific will be of critical importance, but distribution may be hampered by anti-vaccine misinformation. Though it is difficult to gauge the current level of trust in vaccinations, it is noteworthy that one of the individuals cited (and even arrested) for spreading anti-vaccine misinformation during the 2019 measles epidemic in Samoa, Edwin Tamasese, is still active on Facebook with over six thousand followers. His recent posts tout unproven treatments for Covid-19 such as Vitamin C, zinc, and hydroxycholoroquine; criticize the pro-vaccine work of the Gates Foundation and others; and repeat false or misleading claims about the safety of flu vaccines.[91] Even if these views are only representative of a small minority, their refusal to be vaccinated could still threaten the success of Covid-19 recovery plans and lead to deaths.

4. ANALYSIS

Pacific peoples use the internet and social media much like the rest of the world, and they face similar threats of misinformation during the Covid-19 pandemic. But the context in which they access the internet and consume information is affected by a few notable factors that hamper the ability of citizens, governments, and media organizations to respond. This section will explore several of these broader trends and challenges and discuss their effects during the Covid-19 crisis and beyond.

Expanding connectivity without effective safeguards

- *Expanding connectivity due to new undersea cables and infrastructure upgrades is bringing the internet to resource- and information-poor areas of the Pacific, with many positive implications for government service delivery and access to information.*
- *However, as the Covid-19 "infodemic" has highlighted, connectivity can also facilitate harm in these communities, largely due to the lack of safeguarding measures that might have prevented false and harmful information from spreading so quickly online.*
- *Global social media companies are mostly unable or unwilling to moderate user content, enforce transparency rules, or implement fact-checking in the Pacific's small markets.*
- *Meanwhile, many of the region's governments are responding to these harms by proposing or enacting regulations that restrict access to online spaces.*

With twelve independent states, thousands of islands and atolls spanning millions of square kilometers of ocean, and exceptional linguistic and cultural diversity - all with a total population of less than twelve million - the Pacific's unique geography makes it unusually difficult and expensive to deliver public services to citizens. Internet connectivity in the Pacific has also lagged behind other regions of the world due to the absence of high-capacity cables and other technical infrastructure. But after decades of reliance on slow and expensive satellite connections, new undersea cables are finally arriving in the region, including the Australian-financed Coral Sea Cable connecting Sydney to Port Moresby and Honiara.[92] As a result of these cables and other planned reforms and upgrades, industry groups expect that the number of mobile internet users in the Pacific will grow at a rate of about 11% per year between 2018 and 2025.[93]

COUNTRY	POPULATION	MOBILE INTERNET PENETRATION (% OF POP.)	MOBILE SUBSCRIBER PENETRATION (% OF POP.)		SMARTPHONE ADOPTION (% OF MOBILE PHONE OWNERS)	
Year	2018	2018	2018	2025 (projected)	2018	2025 (projected)
Fiji	915,000	60%	84%	87%	43%	72%
Papua New Guinea	8,502,000	12%	30%	37%	22%	63%
Solomon Islands	629,000	21%	31%	61%	49%	53%
Vanuatu	285,000	22%	57%	64%	26%	66%

Source: GSMA, "The Mobile Economy Pacific Islands 2019"

In areas where connectivity is available, Pacific citizens are already quite active on social media and online messaging applications. Products like Facebook, WhatsApp and Messenger are popular ways of sharing news, analyzing political happenings, and staying in touch with diaspora communities. Facebook is especially widespread: small businesses take to the platform to market and sell their products, and government departments use Facebook pages as a cheaper and simpler alternative to official websites, especially for sharing updates on current events and crises. When Tropical Cyclone Winston hit Tonga and Fiji in February 2016, citizens used Facebook and Twitter to stay informed and connected before, during, and after the storm.[94] According to reports at the time, Facebook updates were more timely than government websites or traditional news outlets.[95] Four years after Winston, social media pages – and Facebook especially – remain crucial to disaster communication in the region.

In the political arena, broadening connectivity has changed the way citizens view their governments, and it is rapidly changing the way governments convey messages to citizens. Citizens of Kiribati and Vanuatu, which both had national elections in the first half of 2020, were able to see vote counts play out in real time on Facebook: photos of handwritten vote totals from Kiribati were posted in the 9400-member KIRIBATI ELECTION 2020 group, while Vanuatu's national broadcaster streamed the entire ballot-counting process on Facebook Live.[96] The rollout of mobile broadband across Papua New Guinea has already influenced political changes to the country, as hundreds of thousands of citizens are now able to learn the latest news and monitor happenings in Port Moresby through blogs and Facebook groups filled with lengthy discussions and heated calls to action.[97]

However, even before Covid-19, social media usage coincided with a rise in false online rumors and scams targeting Pacific people that propagate quickly through groups on Facebook and closed messaging applications.[98] The threat of online child sexual exploitation is also concerning, and frontline workers indicate that expanding internet connectivity may be exacerbating the problem.[99] Hate speech, harassment, and harmful rumors can sometimes incite real violence, as has occurred in some parts of Papua New Guinea.[100]

Citing these trends, some governments have threatened to take more drastic measures and block social media entirely, with the rationale of controlling the spread of content that is immoral, dangerous, or corrosive to traditional values and institutions. Tonga considered a ban on Facebook in 2019 to stop slander against the monarchy; Papua New Guinea and Samoa suggested they would block the platform at several junctures over the past few years; and Nauru's government actually did block Facebook from 2015 to 2018.[101] Bans on social media are usually an option of last resort, and they face vociferous opposition from freedom of expression advocates and from individual users.[102] But the frequency with which these measures are proposed in the Pacific does reflect a grim fact: the protections that communities in other parts of the world rely on to address harmful content and abuse on social media are often absent in the region.

Social media moderation systems rely primarily on a combination of algorithms that flag rule-breaking content in various languages, human reviewers who make determinations on flagged material, users who voluntarily report rule-breaking content, and legal requests from law enforcement officials – but none of these systems function effectively in the Pacific. Social media companies see little financial incentive to build systems for Pacific markets with relatively few users, and so they do not invest in algorithms for less-spoken languages like Tongan, Bislama, or Chuukese, nor do they make any particular effort to hire staff from Pacific communities. Voluntary reports from users make up a tiny proportion of the total content that platforms like Facebook remove, and the voluntary reporting rate is likely even lower in regions with lower digital literacy.[103] Furthermore, local social media users often cite examples of rule-breaking content that is left up even after repeated removal requests (and, conversely, of benign content that is taken down due to algorithmic errors or lack of contextual understanding). For instance, in August 2020, ABC reported that naked images of young girls were being posted in Papua New Guinean Facebook groups with thousands of users, with captions in Tok Pisin

that offered more footage of abuse.[104] Facebook was slow to remove these posts, and initially rejected the removal requests submitted by several concerned users.

Facebook does maintain liaison offices in Australia and Singapore that coordinate with some Pacific governments for content removals, especially Fiji, where the Fiji Police Force's Cyber Crime Unit and the Online Safety Commission manage the reporting and investigation process. But in interviews for this report, law enforcement and government officials from smaller Pacific countries and territories stated that they had no consistent channel of communication with social media platforms, or were disappointed by the companies' inaction when presented with examples of harmful content. Other social media companies, such as Twitter, YouTube, and TikTok, have little to no contact with authorities in the region.

Domestic political actors in the Pacific are becoming savvy to the power of social media influence, but without transparency measures and safeguards in place, even relatively simple online influence techniques can go undetected and unstudied. For example, Facebook has built its own transparency systems that are meant to prevent covert use of its advertising tools by politically-motivated actors. But while these tools are widely used by journalists and investigators in dozens of larger markets, they still have not been rolled out to most Pacific island countries.[105] Since Facebook's advertising system allows different messages to be targeted to different segments of the population, this lack of transparency tooling makes it very difficult for observers to track what political actors are saying online. Additionally, relatively few public figures in the Pacific take advantage of the "verified" badges that distinguish official accounts from personal ones, likely because social media companies make little attempt to reach out to the region's leaders. Without "verified" badges, it is much easier for third parties to impersonate leaders on social media and spread disinformation, as has happened repeatedly to the prime minister of Papua New Guinea, James Marape.[106]

Finally, while social media companies increasingly rely on partnered fact-checking services, there are no full-time fact-checkers based in Pacific island countries. Facebook refers to the Australian Associated Press's fact-checking unit for all claims in Australia and the Pacific islands, but due to the team's limited staffing and focus on Australian issues, fact-checks of Pacific issues are few and far between.[107] Without a strong local fact-checking organization, Pacific social media users are missing one of the few tools that global social media companies use to strengthen information ecosystems.

Fragile media ecosystems

- *Pacific information and media ecosystems are under-resourced and restricted by government controls.*
- *Covid-19 is further exacerbating these deficits by cutting into revenue streams for media houses while state-of-emergency laws reduce their space to operate.*

The best remedy for Covid-19 misinformation, according to the UN Secretary-General António Guterres, is "verified, scientific, fact-based news and analysis" from the press.[108] But in the Pacific, deficits in resources, capacity, and access make it more difficult for the press to produce high-quality reporting on specialized scientific or medical topics. Even before the Covid-19 pandemic, NGOs and donors noted the way these deficits hindered coverage of important topics such as climate change, especially for reporting in non-English languages and in rural and remote parts of the region, which is costlier than covering events from the capital.[109]

Many of these same considerations apply to Covid-19: not enough Pacific people, let alone journalists, are educated in scientific and technical fields, and many reporters and editors have received little in the way of formal journalism training.[110] Many media outlets in Pacific island countries are too small and lacking in resources for journalistic specialization that might be seen in other parts of the world. This leaves little scope for analysis or commentary, beyond sporadic editorials. In addition, in several countries, journalists may not have access to academic or industry experts who can provide comment or assist with interpreting scientific or other technical data into terms that are more easily captured in journalistic stories. When citizens turn to social media to fill these gaps, it puts even more pressure on newsrooms to push out stories as quickly as possible. These factors lower the overall quality and comprehensiveness of news coverage.

International and regional media supplement local coverage, and providers from Australia and New Zealand currently play an important role in television and radio. The Australian Broadcasting Corporation (ABC) and Radio New Zealand (RNZ) provide some local-language broadcasts in addition to English and French coverage. When these broadcasts are cut – often due to domestic political or budgetary concerns in Australia and New Zealand – they have real consequences on the availability of information in the Pacific. The cessation of ABC's shortwave radio broadcasts in 2017, for example, was widely lamented, as it meant that remote parts of the region had only informal sources (e.g. Facebook) for the day's news.[111] Since then, Chinese radio

and television have expanded their English and French broadcasts in the region.[112] The Australian media recently responded to this trend by announcing an expansion of its English-language broadcasts into Pacific markets.[113]

The Covid-19 pandemic is putting additional pressures on media in the Pacific. Economic factors, especially the loss of international tourism, are cutting into advertising revenues and forcing newsrooms to lay off staff. Other limitations on the local news media are the result of government controls and tensions that arise from long-simmering disagreements between government and the press around the accuracy of particular news stories, perceived bias in reporting, or the overall role of the domestic media.[114] Following early warnings about the threat of Covid-19 misinformation online, many emergency laws passed in early 2020 included penalties for spreading false or harmful information, which media freedom advocates viewed as harmful to the free press.[115] The Solomon Islands emergency regulation allows the prime minister to "suspend access to online media outlets or media outlets."[116] Vanuatu's law requires reports on Covid-19 to be cleared by the government before publication.[117] The Cook Islands and Kiribati stipulate fines and potentially jail terms for those spreading false or "harmful" information about Covid-19.[118] In Fiji, the preexisting Public Order Act has been used to arrest individuals, including lawmakers and prominent doctors, who posted content on social media that was deemed to be false or contributing to unrest.[119]

Supporters of anti-misinformation laws and penalties say that these measures, similar to the internet restrictions and legislation that came before Covid-19, are necessary for stabilizing an increasingly toxic online environment and raising the quality of discourse.[120] Opponents see them as attacks on the right to free expression, encouraging self-censorship, and reducing citizens' overall understanding of important issues.[121] As the threat of Covid-19 continues largely unabated, and state-of-emergency orders remain in place, media freedom advocates have raised concerns about the effects these restrictions will have on the ability of the media to do its job and the ability of citizens to access information.[122]

Responding to new cyber threats

- *Emerging cyber threats leverage misinformation and disinformation, especially on social media, to cause harm to institutions and societies.*
- *While Pacific cybersecurity actors are aware of these new threats, the region's cyber policies, systems, and practices are not set up to respond in a coordinated and effective fashion.*

The Covid-19 outbreak exposes cyber vulnerabilities within the Pacific region, particularly the lack of effective tools and mechanisms to cope with emerging cyber threats that affect the human and semantic layers of the internet, such as misinformation, disinformation, and doxing. Despite the limited number of confirmed Covid-19 cases in the Pacific, false information about the origin, transmission and cures for Covid-19 has spread quickly online, eroded trust, and put lives at risk.[123] The glut of information at the beginning of the outbreak may have caused panic and confusion among the public, especially when individual cases became the focus of reports among local media and even by government authorities.[124] Speculation around particular Covid-19 patients in Fiji and Papua New Guinea led to cyberbullying and harassment on the basis of gender and religion, while false stories originating in other countries have also been reposted onto local platforms, spreading conspiracy theories such as the false belief in a correlation between 5G and coronavirus.[125] On social media platforms such as Facebook – which is effectively the only way many people in the Pacific access online content – moderation systems meant to remove these materials are inefficient in non-English languages, often resulting in significant delays and failures in labelling or removing false information about Covid-19.[126]

The capacity of the region to protect itself from these kinds of cyber threats is limited by several factors. Awareness of cyber safety practices among the general public is fairly low, especially in areas where networks have been slow and inconsistent. Internet safety advocates say that citizens' inability to spot fake or misleading online materials, combined with the social capital conferred on people who are regarded as "news-breakers," is leading people to accept and share more false and harmful materials. Though local technical communities, CERTs, and governments are turning more attention to awareness-raising and training on misinformation and online safety, these are usually ad-hoc and disconnected efforts of a few dedicated individuals rather than long-term, sustainable programs with scalable grassroots impact.[127] At the policy level, frameworks around cybercrime and cybersecurity are not always in line with current global standards; among Pacific island states, only Tonga has become party to the Council of Europe Convention on Cybercrime (also known as the Budapest Convention), the primary international treaty focused on cybercrime.[128] Cybersecurity practitioners note that vague or incomplete regulations also create ambiguity around the roles of key institutions like CERTs, further reducing their effectiveness.

In many Pacific countries and territories, legislation enacted in response to Covid-19 empowers police forces to address Covid-19 misinformation by arresting individuals who spread false claims online. But while some officers have received cybercrime training through programs like Cyber Safety Pasifika and the Pacific Island Law Officers' Network (PILON), these programs were generally designed to teach officers to understand and address financial scams, phishing attempts, and identity theft, rather than misinformation or disinformation. For journalists and civil rights advocates, the prosecution of online speech during the Covid-19 pandemic is troubling, particularly when there is little clarity around what online speech is permitted, how the laws are enforced, and when the "crisis" period will end and state-of-emergency orders will be rescinded.[129] For the police officers themselves, it has not been entirely clear how they ought to handle the flood of online information, when each option that they try - individually "correcting" each false story online, tracing and arresting publishers of false content, or working with platform companies to remove offending material - comes with ambiguity and technical difficulty.

By all indications, the threats posed by misinformation and disinformation will increase over the coming months and years, as state and non-state actors attempt to manipulate online discourse toward particular strategic objectives. Globally, efforts by politically-motivated domestic and foreign actors (or proxies) to manipulate online platforms and social media are not rare: they are infinitely varied, constantly evolving, and often tied to broader political or national interests.[130] The Pacific has already seen at least one targeted campaign that used disinformation on social media in an attempt to alter perceptions of the conflict in Papua.[131] The threats posed by these campaigns will be compounded by extrinsic pressures and crises where, just as in the Covid-19 pandemic, a glut of information and lack of clear credibility and fact-checking allows rumors to spiral out of control. Political tensions could further complicate the situation, and the narrative "tug-of-war" for influence among major powers on Covid-19 is likely to continue, given rising tensions between the West and China. Such competition for narrative power could exacerbate online misinformation from foreign media, making countries in the region vulnerable to influence operations that target online discourse, media, and communities.[132]

5. RECOMMENDATIONS

Local, regional, and international stakeholders can learn from the experience of the Covid-19 information crisis in the Pacific to build a stronger foundation for online safety and information integrity in the region, pursuing three key objectives:

1. Strengthening official credibility and visibility online

Governments and health authorities across the region have found it difficult to make official, verified information about the pandemic seen above the waves of unofficial and unverified material posted online. The neglect of Pacific internet communities by international stakeholders, including social media companies, also places Pacific leaders at an inherent disadvantage online, with fewer resources and safeguarding mechanisms to cope with online misinformation. But as connectivity continues to expand, governments and public health bodies can work to strengthen their own technical capacity to communicate online, including through local and regional knowledge-sharing with the private sector and civil society. Greater emphasis on effective, timely, and accessible online information-sharing can enable official information to reach communities that need it, especially during crises.

2. Encouraging productive, multi-stakeholder approaches to misinformation

Online misinformation is not an easy category to define, and the Covid-19 experience suggests that it cannot be remedied solely through blocking and removal of online content and prosecution of individuals who spread it. Rather than attempting to eliminate all false or unverified claims online - a massive and largely futile task - local and global stakeholders can instead focus on measures that would add richer context into online discussions and provide better recourse for individuals to handle false and harmful materials on social media. Civil society should play a leading role in these efforts, especially for fact-checking, media production for local audiences, knowledge transfer, and education programs that reach local communities and vulnerable groups. Governments, in consultation with technical communities and the private sector, can institute general standards and norms around official information-sharing and support measures that build digital and media literacy among Pacific communities and education systems.

3. Preparing for emerging threats to online information ecosystems

The trends observed during the Covid-19 pandemic, both in the Pacific and globally, point to several future threats that may affect Pacific Island countries and territories. Increased geopolitical maneuvering by foreign powers will change the calculus around the Pacific media and internet. Economic contraction could cause tensions and conflict to escalate and be further exacerbated by hate speech and disinformation online, while local media outlets will struggle to continue producing high-quality content. Recovery from Covid-19 and responses to future crises will require stronger mechanisms for identifying and reporting problematic content online, better coordination across institutions and governments within the region, more engagement between social media companies and Pacific leaders, and stronger local capacity (outside of government) to identify problematic content and bad actors online. Leaders can take practical steps now to anticipate and prepare for future potential threats to health and safety.

Opportunities for action

Governments in Pacific island countries can:
- Plan ahead for future "infodemic" crises: define clear roles and responsibilities for each stakeholder or agency in online risk communication and response, investigation and response to online misinformation, and coordination with online platform companies and local media to disseminate accurate information quickly and effectively;
- Share and adopt good practices for online information-sharing between governments and health authorities across the region, to indicate clearly which information is coming from credible sources and avoid violations of privacy;
- Expand access to accurate online information and announcements by posting in local languages, sharing in online groups that people use, and partnering with the private sector to reduce costs to access critical information;
- Ensure that capacity-building for effective online communication is delivered to both junior-level staff and senior leaders;
- Include the Pacific technical community in policy-making processes around online safety and misinformation.

Social media companies can:
- Extend anti-abuse systems in Pacific languages and countries to prevent local distribution of disinformation, misinformation, violations of privacy, and abuse;
- Identify and support locally-relevant fact-checking partners for Pacific media markets that include staff based within Pacific island countries and territories, and not just Australia and New Zealand;
- Provide training resources and consistent lines of communication to Pacific governments, especially health ministries and crisis response agencies.

Technical and cybersecurity communities can:
- Work with government to clarify the technical and legal frameworks in place to address online misinformation in each country, and how they would apply to future crises, filling gaps in current technical knowledge and understanding;
- Advance multi-stakeholder dialogue to bridge the gaps between technical communities, government, and citizens;
- Conduct training and capacity building for technical teams within government, in the private sector, and in CERTs to handle online misinformation;
- Advance cross-sectoral understanding and consensus on norms-based approaches to misinformation and disinformation in Pacific contexts;
- Make technical community events more open and inclusive of all actors in the ICT sector;
- Set clear roles and responsibilities for different stakeholders in dealing with online misinformation, disinformation, hate speech, and harassment.

Civil society organizations, such as universities, religious networks, and local NGOs, can:
- Support reporting and fact-checking of stories and claims spread on social media by serving as sources for local media and investigators of false and harmful content that affects their communities;
- Promote media and digital literacy within their communities by sharing best practices for verifying claims on social media and referring to legitimate sources when debunking misinformation;
- Highlight issues that affect Pacific online information ecosystems by participating in global forums, conferences, and dialogues on internet governance, online safety, and risk communication;
- Compile and share data that illustrates local information ecosystems in the region and can inform action by local and global stakeholders.

Development partners and donors can:
- Support digital and media literacy education efforts that enable people throughout the region - and especially in newly-connected areas - to be safe consumers and effective producers of online content;
- Provide ongoing, sustainable funding sources for anti-misinformation programs that benefit diverse communities, including people with disabilities;
- Support regional institutions to operate as interlocutors and connectors, bridging gaps between technical communities, policymakers, and civil society;
- Support local leadership within the Pacific media sector to enable training, collaboration, and development of new business models to survive through this economic crisis;
- Support training and education programs for journalists that incorporate training on how to track, identify, and respond to online misinformation, and how to report on scientific and technical topics;
- Support or catalyze innovation in the Pacific media sector, particularly in the digital media space.

Media organizations can:
- Work with regional peers to understand and investigate online misinformation, including participating in non-partisan fact-checking networks for claims spread on Pacific social media networks;
- Seek out sources in the health sector and other specialist communities, in order to inform reporting on important medical topics even when government sources are inaccessible;
- Experiment with alternative formats and journalism business models that respond to real concerns of citizens and take advantage of increasing internet connectivity in Pacific communities.

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